How to continue with Time Bounded Services

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Status:

- We adopted to use DTBS, and delete the original CF-TBS specification.
- The Active priority based DTBS proposal was voted down in the Orlando planery after acceptance by the MAC.
- We did not get any feedback from the PHY people about their Active priority signalling conserns.
- How to continue??

AT&T Generic Priority proposal IEEE P802.11-94/150d

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A generic priority approach.

- **Goal:**

  Implement a generic approach in the MAC for the DCF priority mechanism, that allows both an active and passive implementation on a per PHY basis.

- **Every PHY standard should also specify the parameters for selecting the priority control method.**

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What is needed to comply with our PAR?

- **We need a MAC that can support DTBS, to comply with the PAR.**
- **Does all PHY's need to specify support for DTBS?**
  - **Current lower speed PHY's are less or not suited for support of actual applications.**
  - **Higher speed PHY's are better suited for most applications.**
- **So, do all PHY's need to support DTBS???**

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Generic Priority mechanisms proposal:

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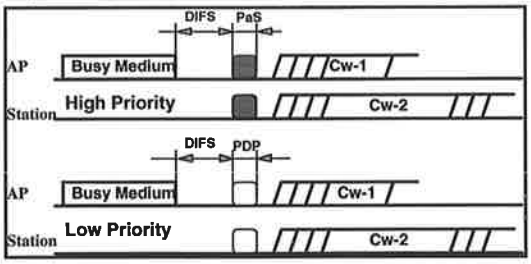

- High priority:
  DIFS=y; PDP = 0; PaS = x
  DIFS=H; PDP = 0; PaS = 0
- Low Priority:
  DIFS=y; PDP = x; PaS = 0
  DIFS=L; PDP = 0; PaS = 0

- Allows for different priority implementation mechanisms on a per PHY basis.
  - DIFS=L,H with PDP=PaS=0 for multiple IFS method.
  - DIFS= fixed with PDP and PaS parameterization for active priority signalling (future PHY's)
- AP and Station priority separation by CWmin parameter (MAC).

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Priority mechanism selection:

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- Each PHY standard should specify the three channel access parameters per priority level (DIFS, PDP, PaS).
  - Current PHY standards can select the multiple IFS approach if they have a problem with active signalling.
  - Future 5.2 GHz PHY's should select active priority signalling, to be compatible with a "priority based Etiquette".
- MAC state machine should include active priority signalling under parameter control.
- This allows acceptance of the generic mechanism while postponing or circomventing the PHY specific issue's associated with active priority signalling.

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